

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Currently Amended) A method of using a combination of nucleating agents to enhance rate of formation of a solid crystal structure in a thermoplastic elastomer being injection molded into an article, comprising the steps of:
adding a combination of nucleating agents consisting of an organic phosphate ester salt, sodium benzoate, a norbornane carboxylic acid salt, and a nucleating talc to a thermoplastic phase of a thermoplastic elastomer;
injection molding the thermoplastic elastomer composition into the article in a cycle time of at least 22 percent faster than a cycle time for injection molding a thermoplastic elastomer composition in which the combination of nucleating agents of the adding step were not present;

permitting the thermoplastic elastomer composition in the article to cool, wherein the nucleating agents stimulate formation of a solid crystal structure within the thermoplastic phase of the thermoplastic elastomer composition more rapidly than if the combination of nucleating agents of the adding step were not present,

wherein the thermoplastic elastomer before the adding step comprises at least one thermoplastic elastomer having at least one elastomeric phase and at least one thermoplastic phase, wherein the at least one thermoplastic phase consists essentially of at least one propylene-based polymer and the at least one elastomer phase comprises a styrenic copolymer rubber phase or an at least partially crosslinked ethylene-propylene-diene rubber phase;

wherein the composition comprises about 0.005% to about 5% by weight nucleating agents based on total weight of the thermoplastic phase in the thermoplastic elastomer; and

wherein the molded article injection molded from the thermoplastic elastomer and the combination of nucleating agents of the adding step has an enhanced rate of crystal formation in the thermoplastic phase of the thermoplastic elastomer during cooling of the thermoplastic elastomer to achieve a solid crystal structure for the injection molded article in a shorter time as compared to injection molding of the thermoplastic elastomer into the injection molded article without the combination of nucleating agents of the adding step, thereby allowing the faster cycle time of the injection molding step.

9. (Cancelled)

10. (Previously Presented) The method of claim 8, wherein the thermoplastic elastomer comprises at least two chemically distinct thermoplastic phases.

11. (Previously Presented) The method of claim 8, wherein the thermoplastic phase comprises a continuous phase and the elastomer phase comprises a discontinuous phase dispersed in the continuous thermoplastic phase.

12. (Cancelled)

13. (Previously Presented) The method of claim 8, wherein the thermoplastic elastomer comprises at least one thermoplastic phase of polypropylene; and wherein the thermoplastic elastomer comprises styrene-butadiene (SB) rubber, styrene-ethylene-butadiene-styrene (SEBS) rubber, styrene-ethylene-propylene-styrene (SEPS) rubber, styrene-isoprene-styrene (SIS) rubber, styrene-ethylene-ethylene-propylene-styrene (SEEPS) rubber, styrene propylene-styrene (SPS) rubber, hydrogenated versions of the foregoing, or combinations thereof.

14. (Previously Presented) The method of claim 8, wherein the article has enhanced transparency as compared to an article formed from a composition without the nucleating agents.

15. (Previously Presented) The method of claim 8, wherein the organic phosphate ester salt is present in about 0.1 weight percent, wherein the sodium benzoate is present in about 0.1 weight percent, wherein the norbornane carboxylic acid salt is present in about 0.15 weight percent, and the nucleating talc is present in about 0.2 weight percent.